

What is claimed is:

1. A surgical screw which is at least partially bioabsorbable in vivo comprising:

an elongated shank, at least a portion of said shank comprising threads; and

a head comprising a proximal surface that is substantially perpendicular to the longitudinal axis of the shank, said shank protruding distally from said head, said head comprising a recess in said proximal surface, said recess having a cross-section with a rotational symmetry around the longitudinal axis of the shank, said recess comprising an odd number of rounded lobes extending away from the center of the head.

2. A screw according to claim 1, wherein said lobes are selected from the group consisting of ovals, circles, and rectangles with rounded edges.

3. A screw according to claim 1, wherein said recess is formed by a process selected from the group consisting of machining, thermoforming, and machining combined with thermoforming.

4. A screw according to claim 1, wherein at least a portion of said screw comprises self-reinforced material.

5. A screw according to claim 1, wherein said head further comprises a distal surface that tapers towards said shank.

6. A screw according to claim 1, wherein said screw further comprises a bore extending from said recess towards said shank.

7. A screw according to claim 6 wherein said bore extends the entire length of said screw.

8. A screw according to claim 1 wherein said recess extends the entire length of said screw.

9. A surgical screw which is at least partially bioabsorbable in vivo comprising:

an elongated shank, at least a portion of said shank comprising threads; and

a head comprising a proximal surface that is substantially perpendicular to the longitudinal axis of the shank,

said shank protruding distally from said head,

said head comprising a recess in said proximal surface,

said recess having a cross-section with a rotational symmetry of 120 degrees around the longitudinal axis of the shank,

said recess having three rounded lobes extending away from the center of the head, said lobes forming the cross-sectional shape of a cloverleaf.

10. A screw according to claim 9 wherein said screw further comprises a bore extending from said recess towards said shank.

11. A screw according to claim 10, wherein said bore extends the entire length of said screw.

12. A surgical screw which is at least partially bioabsorbable in vivo comprising:

an elongated shank, at least a portion of said shank comprising threads; and

a head comprising a proximal surface that is substantially perpendicular to the longitudinal axis of the shank,

said shank protruding distally from said head,

said head comprising a plurality of recesses in said proximal surface,

said recesses being located in said head so as to have a rotational symmetry around the longitudinal axis of the shank,
said recesses having curved shapes.

13. A screw according to claim 12, wherein said recesses have shapes selected from the group consisting of ovals, circles, and rectangles with rounded edges.

14. A surgical screw system comprising:

a surgical screw which is at least partially bioabsorbable in vivo and an inserter for said screw,
wherein said screw comprises:

an elongated shank, at least a portion of said shank comprising threads; and

a head comprising a proximal surface that is substantially perpendicular to the longitudinal axis of the shank,

said shank protruding distally from said head,

said head comprising a recess in said proximal surface,

said recess having a cross-section with a rotational symmetry around the longitudinal axis of the shank,

said recess having three rounded lobes extending away from the center of the head,

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said lobes forming the cross-sectional shape of a cloverleaf;

and wherein said inserter for said screw comprises:

an elongated body having a distal end,

said distal end comprising three rounded lobes forming the shape of a cloverleaf in cross section,

said lobes having a rotational symmetry around the longitudinal axis of said body, at least a portion of said distal end having a cross section substantially the same as the cross section of said recess in said screw head;

wherein said distal end is capable of slidable engagement with said recess in said screw head.

15. The surgical screw system of claim 14,

wherein the cross section of said distal end gets progressively smaller towards the distal tip of said distal end.

16. The surgical screw system of claim 15,

wherein said screw further comprises a bore extending from said recess towards said shank; and said inserter further comprises a distal protrusion protruding from said distal end, said distal protrusion having a cross section substantially the same as the cross section of said bore;

wherein said distal protrusion is capable of slidable engagement
with said bore.

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